

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query                         | DBs   | Default Operator | Plurals | Time Stamp          |
|-------|------|--------------------------------------|---|------------------|---------|---------------------|
| S1    | 139  | "5250137" or "6249076" or "6475637"  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | OFF     | 2008/10/14<br>11:31 |
| S2    | 142  | "5250167" or "6249076" or "6475637"  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | OFF     | 2008/10/14<br>11:38 |
| S3    | 0    | S2 and (electrode adj4 in)           | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | OFF     | 2008/10/14<br>11:53 |
| S4    | 12   | S2 and (electrode adj4 gel)          | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | OFF     | 2008/10/14<br>11:54 |
| S5    | 97   | S2 and electrode and gel             | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | OFF     | 2008/10/14<br>11:55 |
| S6    | 169  | "5250137" or "6249076" or "6475639"  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | OFF     | 2009/01/11<br>16:55 |
| S7    | 0    | S6 and (releas\$4 near hydrogen \$2) | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | OFF     | 2009/01/11<br>16:56 |

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| S8  | 2   | electrode and gel and polymer and actuator and motor and acid \$4 and bas\$2 and (releas\$4 near hydrogen\$2) | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>16:57 |
| S9  | 593 | electrode and gel and polymer and actuator and motor and acid \$4 and bas\$2                                  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>16:57 |
| S10 | 306 | S9 and hydrogen   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>16:58 |
| S11 | 59  | S10 and occlud\$5   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>16:58 |
| S12 | 306 | S10 and hydrogen  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:05 |
| S13 | 2   | S10 and ((occlud\$4 or release\$4) near hydrogen\$2)  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:05 |
| S14 | 2   | S10 and ((release\$4) near hydrogen\$2)   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:06 |
| S15 | 29  | S10 and (change near ph)  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:06 |
| S16 | 6   | S9 and (dimethylaminomethyl)  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:19 |

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| S17 | 51  | S9 and (sodium near acrylate\$2)   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:20 |
| S18 | 1   | electrode and gel and polymer<br>and actuator and motor and acid<br>and base and (releas\$4 near<br>hydrogen\$2) | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:22 |
| S19 | 503 | electrode and gel and polymer<br>and actuator and motor and acid<br>and base                                     | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:23 |
| S20 | 215 | electrode and gel and polymer<br>and actuator and motor and acid<br>and base and hydrogen and ph                 | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:23 |
| S21 | 0   | S20 and (sodium near acrylate%<br>3)   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:23 |
| S22 | 26  | S20 and (sodium near acrylate\$3)  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:23 |
| S23 | 0   | S20 and (dimethylaminomehtyl)  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:27 |
| S24 | 0   | S20 and (methylbisacrylamide\$2)   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:27 |
| S25 | 11  | S20 and (ammonium near<br>persulfate\$2)   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:28 |

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| S26 | 20  | S20 and (radical near polymerization\$2) | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>17:31 |
| S27 | 78  | "5100933"                                | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>22:02 |
| S28 | 6   | S27 and tanaka.in.                       | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>22:03 |
| S29 | 14  | S27 and methylenebisacrylamide           | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>22:08 |
| S30 | 11  | S27 and sodium acrylate                  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>22:10 |
| S31 | 26  | S27 and persulfate                       | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>22:11 |
| S32 | 169 | "5250167" or "6249076" or "6475639"      | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | OFF | 2009/01/11<br>22:15 |

### EAST Search History (Interference)

| Ref # | Hits | Search Query   | DBs                      | Default Operator | Plurals | Time Stamp       |
|-------|------|--|--------------------------|------------------|---------|------------------|
| L1    | 1    | polymer\$2 same actuator\$2 same gel\$2 same (releas\$4 hydrogen\$2) | US-PGPUB; USPAT;<br>UPAD | ADJ              | OFF     | 2009/11/23 10:21 |
| L2    | 593  | polymer\$2 same actuator\$2 same gel\$2                              | US-PGPUB; USPAT;<br>UPAD | ADJ              | OFF     | 2009/11/23 10:24 |
| L3    | 145  | l2 and hydrogen\$2   | US-PGPUB; USPAT;<br>UPAD | ADJ              | OFF     | 2009/11/23 10:24 |

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**11/ 23/ 2009 10:33:36 AM**

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